DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020527 Address: 333 Burma Road **Date Inspected:** 03-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. LIU HUA JIE **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the longitudinal diaphragm to floor beam hold back weld joint located on 11EE+12AE at bike path side. The weld is designated as SEG3001W-019. The welder is identified as 047353. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2233-ESAB.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Fillet welds joining the T-Rib to side plate hold back weld joint located on 11EE+12AE at cross beam side. The weld is designated as SP640-001-027(11EE). The welder is identified as 040367. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2132-ESAB.

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ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Complete Joint Penetration (CJP) welds joining the bottom plate to side plate hold back weld joint located on 11EE+12AE at cross beam side. The weld is designated as SEG074A-011(11EE) & SEG3001A-015(12AE). The welder is identified as 044515. ZPMC QC Mr. AN QING XING was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-P-2214-B-U2-FCM-1.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Fillet welds joining the longitudinal diaphragm to bottom plate hold back weld joint located on 11EE+12AE at cross beam side. The weld is designated as SEG074B-021(11EE). The welder is identified as 044473. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2132-ESAB.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Complete Joint Penetration (CJP) welds joining the bottom plate to side plate hold back weld joint located on 11EE+12AE at bike path side. The weld is designated as SEG074A-012(11EE) & SEG3001A-016(12AE). The welder is identified as 053871. ZPMC QC Mr. AN QING XING was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-P-2214-B-U2-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Complete Joint Penetration (CJP) welds joining the bottom plate to side plate hold back weld joint located on 11EW+12AW at cross beam side. The weld is designated as SEG3004A-016(12AW). The welder is identified as 053871. ZPMC QC Mr. SHI LIE was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-P-2214-B-U2-FCM-1.

2. NDT:

Magnetic Particle Testing (MT):

MT carried out as per the ZPMC submitted Notification No 07605.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area that has been previously tested and accepted by ZPMC MT technicians. This QA Inspector generated a TL-6028 MT report on this date. The weld designation numbers is as follows: SEG070B-029, SEG070C-007, SEG072B-044, 043, 064, 057, 006 & SEG072C-044, 043, 065, 057, 006.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer